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## CLOSE-UP STUDY OF SHOCK WAVES

ELECTRON BEAM  
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PHOTOMULTIPLIER  
SHOCK TUBE

The electron densitometer shown here was designed and built at Los Alamos Scientific Laboratory to study the structure of shock waves and to investigate the fast reactions associated with strong shock and detonation waves. This instrument provides space resolution of less than 0.2 mean free path under normal operating conditions.

It is believed that this is the first application of electron beam techniques to the direct measurement of transient flow phenomena. For an illustrated brochure about Los Alamos write to

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scientific laboratory  
OF THE UNIVERSITY OF CALIFORNIA  
LOS ALAMOS, NEW MEXICO

## LETTERS

Fulbright scholars

Pasadena, Calif.

Sir:

I have learned that the number of Techmen applying for Fulbright Scholarships declined drastically this year over previous years. I was fortunate enough to have spent last year studying in Germany on such a scholarship, and I sincerely believe that, in failing to apply for these scholarships, Techmen are passing up a truly valuable opportunity.

I feel that the year of foreign study offered by the Fulbright program is particularly valuable to a Tech student who has just received his BS for it gives him a year to "recuperate" from the rather strenuous four years of undergraduate work behind him, and a chance to consider fully what sort of graduate work he wishes to undertake.

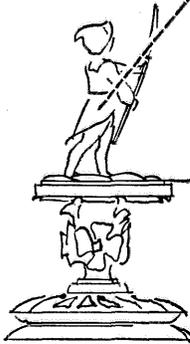
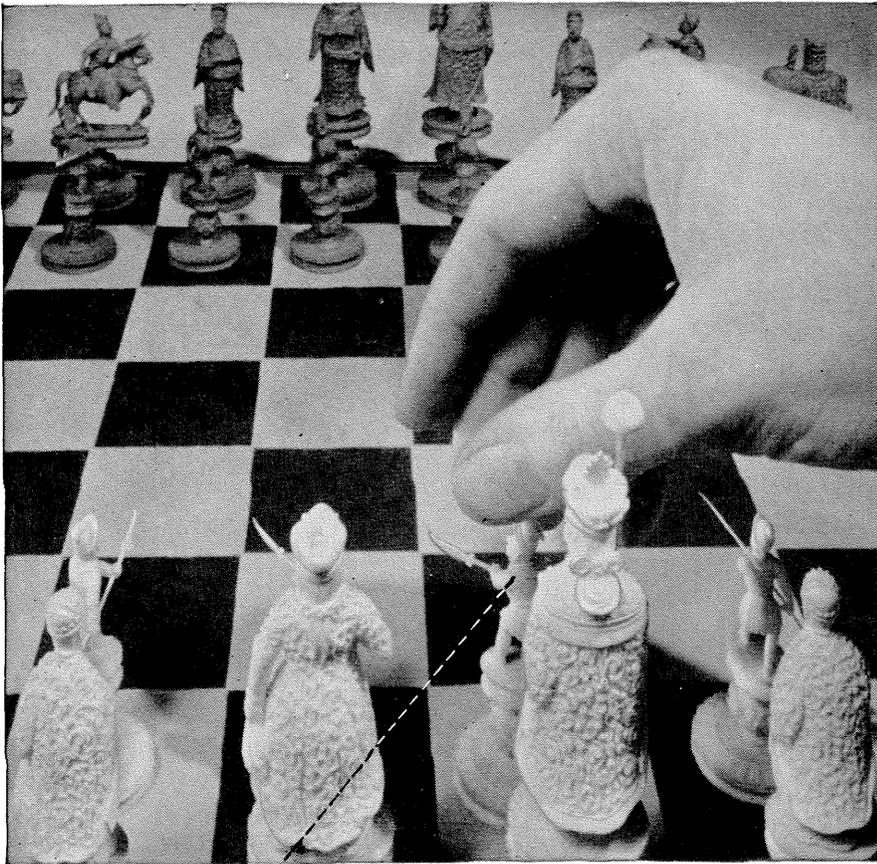
Of no less importance is the fact that spending a year studying in a foreign country is almost certain to give a reasonably intelligent and open-minded individual a much broader background, both intellectually and culturally. I feel that living among another people, and having the opportunity to compare their basic views and way of life with our own, gave me a better understanding not only of that nation but also of my own.

Since the university system of most European countries is very informal by Tech standards—required courses, problem sets, or tests being very infrequent—you have a great deal of free time to use as you see fit. I personally chose to devote a lot of this time to the cultural activities which I had been postponing for the last four years.

In closing I would like to point out one potential disadvantage in a year of foreign study — namely that, because of the great differences between the European and American university systems, there is very little

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**MOTOROLA**

**Letters . . . CONTINUED**

chance of obtaining formal credit for such a year of study. In many countries there is no clear distinction between graduate and undergraduate courses, so it may prove impossible to obtain credit toward an advanced degree for the work taken during this year. Thus, unless you are willing to delay your graduate program for a year you would be ill-advised to apply for a Fulbright. But if you are willing to postpone your formal graduate studies, I can certainly think of no better way to "waste a year" academically.

Since the applications must be submitted in November, I would like to urge all members of the class of '58 to seriously consider applying for one of these scholarships, and to decide on which country they would like to apply for. I would certainly be happy to talk to anyone interested in applying for Germany.

*John Domingo '55*

**Calling all patent lawyers**

*New York City, N.Y.*

Sir:

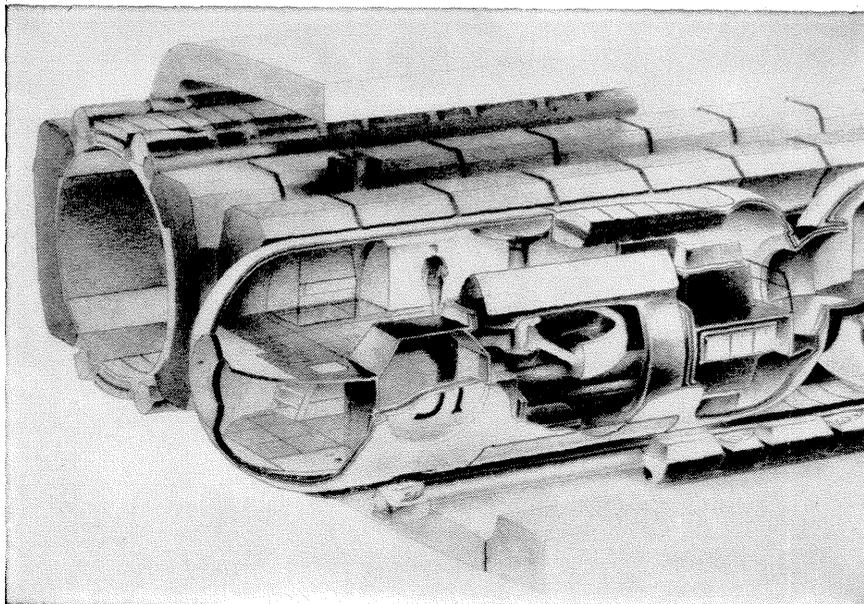
I have often wondered how many Caltech alumni are patent lawyers. I only know of about four, but there must be others, and I thought we might attempt a get-together during some future meeting of patent lawyers—as, for example, during the patent meetings of the Practicing Law Institute.

*Dudley B. Smith '45*  
*Cluett, Peabody & Co., Inc.*  
*530 Fifth Avenue*  
*New York 36, N.Y.*

The Alumni Association has these additional names on file as patent lawyers. Anyone else who wants to be included in this list can get in touch with the Alumni Office.

*William J. Elliott '45*  
*Elliott & Pastoriza*  
*Santa Monica, Calif.*

.....  
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man and motion:

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